

# Wildlife Habitat in Grassed Waterways (Supplement to Job Sheet 412)

USDA – NATURAL RESOURCES CONSERVATION SERVICE – NORTH CAROLINA



*Photo courtesy of Ken Taylor, North Carolina Wildlife Resources Commission.*



*Photo courtesy of USDA Natural Resources Conservation Service.*

While the primary purpose of grassed waterways is to serve as a stable conduit for water movement, when designed and managed with wildlife considerations, they can be beneficial for species common in grassy and brushy habitats, such as song sparrows, common yellowthroats, and cotton rats. Well-managed grassed waterways may also provide foraging opportunities for typical forest wildlife, such as whitetail deer, wild turkey, and red-tailed hawks. This job sheet will help you design a grassed waterway that provides optimum wildlife habitat.

The importance of grassed waterways for wildlife include:

- ◆ The diversity of plants in a well-managed grassed waterway will increase the availability of food resources such as seeds and insect prey (important for many wildlife species, e.g., during the first few weeks of life, the diet of species like quail and turkey chicks is composed almost entirely of insects).
- ◆ Grassed waterways provide links between forests and field interiors, expanding the amount of useable wildlife habitat.
- ◆ Grassed waterways can provide important cover and loafing areas for many species of wildlife.

## *Grassed Waterway Establishment*

- ◆ For wildlife habitat purposes, the ideal grassed waterway will appear unkempt and be composed of a variety of plant species.
- ◆ A grassed waterway managed for wildlife will attain a height of 2-4 feet. It will be comprised of planted species, for example, switchgrass and indian grass, as well as volunteer vegetation such as blackberries, goldenrod, and broomsedge (See attached table of Wildlife Grassed Waterway Plantings).
- ◆ The Southeast Quail Study Group recommends the following for replacing tall fescue with wildlife plantings:
  - Step 1: Mow, graze, or preferably burn the fescue in late winter for a spring treatment or late summer for a fall treatment.
  - Step 2: Allow the fescue to green-up to a height of at least six inches.

Step 3: Spray the field with one or two quarts per acre of glyphosate (Roundup<sup>™</sup>) or 3 WSP (water soluble packets) of Plateau<sup>™</sup>, 6-7 ounces of surfactant, and ten gallons of water per acre. Always check the product label to insure that the mixture used is adequate for the site being treated. In spring treatments wait two weeks after the initial spraying. If there is still green fescue, spot spray the problem areas. For fall treatments, spray during fall green-up then wait until the next spring and spot spray if needed.

Step 4: After a good kill is achieved, establish wildlife-friendly vegetation.

To get the most wildlife benefits out of a grassed waterway, consider the following management practices:

- ◆ Periodic disturbance of grassed waterway vegetation is necessary to stimulate growth of desirable vegetation to improve wildlife habitat and to eliminate encroachment of woody vegetation.
- ◆ As a rule of thumb, disturbance should occur within a grassed waterway every 3-5 years. However, if visual observation suggests more or less frequent disturbance activity is required, then adapt the schedule accordingly.
- ◆ Prescribed fire and selective removal of target species are the preferred management techniques.

<b>Grassed Waterway Management for Wildlife</b>		
<b>METHOD</b>	<b>TIMING</b>	<b>NOTES</b>
Prescribed burning	1 February through 15 April	burn prior to spring green-up; insure firebreaks are properly installed to contain fire
Weed Sweep <sup>™</sup> herbicide appl.	15 April through 15 June	select herbicide to control target species and follow label directions for environmental concerns
Spot spray herbicide	15 April through 15 June	select herbicide to control target species and follow label directions for environmental concerns
Mowing	15 September through 1 April	mowing should be done after August to avoid nests of quail, rabbits, turkeys and other ground nesting wildlife. mow to maintain a minimum of 12 inches of cover with 18 inches preferred

## SUGGESTED GRASSED WATERWAY PLANTINGS BENEFICIAL TO WILDLIFE

PLANTING DATE	MIXTURE/RATE
1) 15 September thru 1 November.....	Small grain/switchgrass mix (40 lbs. wheat or rye, 5 lbs. switchgrass)
2) January thru-April.....	10 lbs. Kobe, 5 lbs. partridge pea, 40 lbs. wheat or rye, 4 lbs. little bluestem
3) May thru August.....	5 lbs. browntop millet, 5 lbs. Kobe, 3 lbs. 'Atlantic' Coastal panic grass, 3 lbs. switchgrass, 3 lbs. little bluestem
4) September thru December.....	40 lbs. wheat or rye, 5 lbs. switchgrass, 2 lbs. Ladino clover
5) 1 April thru 15 June.....	Switchgrass - 7 lbs. drilled, 9 lbs. broadcast
6) 1 April thru 15 June.....	'Atlantic' Coastal panic grass - 10 lbs. drilled or broadcast
7) 1 April thru 15 June.....	Eastern gamma grass - 8 lbs. drilled only
8) May.....	5 lbs. switchgrass, 4 lbs. Atlantic' Coastal panic grass, 3 lbs. Kobe/Korean Lespedeza
9) Late February thru mid-April.....	3 lbs. reseeding soybeans, 5 lbs. Kobe/Korean lespedeza, 5 lbs. red clover, 5 lbs. partridge pea
10) September-thru October.....	18 lbs. Shilo orchardgrass, 40 lbs. wheat or rye, 3 lbs. Ladino clover, 5 lbs. crimson clover
11) Sept.-Nov.....	10 lbs. Kobe lesp., 40 lbs. wheat/rye/oats, 4 lbs. little bluestem, 3 lbs. innnoc. white clover, 3 lbs. unhulled shrub lespedeza, 2 lbs. orchard grass, 5 lbs. switchgrass
12) April-June.....	15 lbs. browntop millet, 15 lbs. sudex, 5 lbs. Kobe lesp., 3 lbs. hulled shrub lesp., 3 lbs. 'Atlantic' coastal panic grass, 3 lbs. switchgrass, 3 lbs. Eastern gamma grass, indian grass, or big bluestem

Additional information is available from your local NRCS office, North Carolina Cooperative Extension Service, North Carolina Wildlife Resources Commission, and various conservation organizations.

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